

REMARKS

Claims 1-2 and 4-5 stand rejected under 35 U.S.C. 102 (b) as being anticipated by Najour et al. (U.S. Pat. No. 6,379,136). The Examiner states that Najour et al. discloses an adjustable shroud (adjustable draw jet assembly) for use in a melt spinning process having a spinneret, and means to adjust the length of the shroud (means to adjust the distance between the spinnerets and the draw-jet slot of the draw jet assembly, and sliding means adjusting the slot extension length). Furthermore, the Examiner states that Najour et al. disclose a shroud in the form of nesting walls, and a hydraulic screw jack system for moving the draw jet assembly to adjust the length. Applicant respectfully disagrees.

The Examiner has either misunderstood or mischaracterized the Applicant's invention or the cited reference. Najour et al. disclose an adjustable draw jet assembly, which is in no way the same as the adjustable shroud claimed by the Applicant. A draw jet is not a shroud. A draw jet is a high-speed drawing device that utilizes the tension created by high velocity air when it impinges a filament threadline to draw the filaments. It is a filament drawing system, and occurs post quenching. See Najour et al. Abstract and Column 5, lines 42-47.

Drawing is the process of attenuating or increasing the length per unit weight of laps, slivers, slubbings, or rovings, or the hot or cold stretching of continuous filament yarn or tow to align and arrange the crystalline structure of the molecules to achieve improved tensile properties. According to Najour et al., the draw jet system is utilized to manufacture fibers that have a very low denier.

A shroud on the other hand functions primarily to delay the cooling and increase the draw down prior to quenching. See Application as filed, page 2, paragraph 1. The shroud is positioned adjacent the spinnerets such that the molten polymer exits from the spinneret, passes through the shroud, and continues to other known equipment and processes. See Application as filed, page 2, paragraph 4. The shroud controls the

cooling rate, thereby controlling the physical and mechanical properties of the yarns. See Application as filed, page 1, paragraph 1. Many physical and mechanical properties of the fibers depend on the polymer, the temperature of the polymer, the rate at which the fiber is spun and the quenching of the yarn, all of which effect the cooling rate. Thus, when the yarn denier or number of filaments changes, the shroud length needs to be optimized for these changes.

Since a draw jet is not a shroud as defined by the current invention, the adjustable draw jet of Najour et al. cannot anticipate the Applicant's invention. Therefore, the Applicant respectfully submits that this rejection has been traversed.

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Najour et al. (U.S. Pat. No. 6,379,136) in view of Katou et al. (U.S. Pat. No. 5,173,310). The Examiner claims that it would be obvious to one of ordinary skill in the art to include a heating means as taught by Katou et al. in the invention of Najour et al. to continuously change the cooling of filaments.

Again, the Examiner is misrepresenting the teachings of the cited references. Katou et al. discloses a "device for cooling molten filaments in a spinning apparatus." Cooling air blown from a cooling apparatus cools the filaments. A heater is provided in the flow path of the cooling air wherein the pitch of the heating wires is made closer upstream so as to gradually increase the amount of heat generated, or the flow path of the cooling air is formed so as to gradually narrow in the upstream direction, or is formed so as to gradually increase the pressure loss.

Katou et al. do not disclose a shroud. This is a quenching apparatus. A quenching apparatus controls the rate of cooling of the molten threads. It cannot be used to obviate a device that by the Applicant's own admission is used *prior to quenching*. See Application as filed, page 2, paragraph 1.

Katou et al. do not even disclose a draw jet as defined by Najour et al. As stated above, a draw jet is a high-speed drawing device that utilizes the tension created by high velocity air when it impinges a filament threadline to draw the filaments. It is a filament drawing system, and occurs post quenching. A quenching device is used to cool the fiber filaments after extrusion by carefully controlled airflow. With all due respect, the Examiner is attempting to combine reference having nothing to do with each other, to obviate an invention that has nothing to do with either of the two references. While the individual pieces may bear some tangential relation to each other, they do not perform the same function. Therefore, Applicant submits that this rejection has been traversed.

Claims 7-8 and 10-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Najour et al. (U.S. Pat. No. 6,379,136) in view of Katou et al. (U.S. Pat. No. 5,173,310). The Examiner states that it would be obvious for one of ordinary skill in the art at the time the invention was made to include the heating means of Katou et al. in the invention of Najour et al. to continuously change the cooling filaments.

In light of the comments made above regarding the inapplicability of both Najour et al. and Katou et al., Applicant submits that this rejection is also traversed. As pointed out above, the features pointed out by the Examiner are only tangentially related at best, and in no way can they satisfy the burden of *Graham v. John Deere* in obviating the current invention.

The Applicant has added new claims 18-23 in order to better define the relative position of the shroud and the function thereof. Each new limitation is fully supported by the application as filed, and therefore does not constitute new matter.

The Examiner has indicated that Claims 3 and 9 would be allowable if rewritten in independent form, including the limitations of the base claim from which they depend. The Applicant thanks the Examiner for the allowance of the claims. However, the Applicant believes that in light of these comments, the underlying independent claim should also be allowable at this time.

The Examiner has stated that the prior art of record does not disclose or suggest an adjustable shroud or combination of an adjustable shroud in a spinneret comprising among others, a quadrilateral adjustable shroud, wherein the two walls form a quadrilateral shroud with two folding walls. Further to that, applicant submits that the prior art does not teach an adjustable shroud positioned beneath the spinneret, where said shroud has a means to secure it close to a spinneret, and a means to adjust the length of the shroud. The cited prior art fails even to disclose the existence of a shroud and, therefore, cannot be relied upon to anticipate or obviate the current invention. The Examiner concludes that the Applicant's amendments to the Office Action of May 11, 2004, necessitated the new grounds of rejection presented currently. Applicant disagrees, and submits that the finality of the current rejection is improper.

The amendment presented in the previous Office Action was fully in line with the specification, and required no new search by the Examiner. The Applicant has described in the application as filed the position of the claimed shroud relative to the spinneret. The Examiner should have searched for an apparatus with similar relative positioning of a shroud-like feature in the position disclosed by the Applicant. The Najour et al. reference should have been discovered through, disclosed in, and discussed by the previous Office Action. The Examiner's failure to adequately perform a search of the prior art cannot be held against the Applicant.

Furthermore, the Examiner relies upon the wholly new Katou et al. reference (U.S. Pat. No. 5,173,310) to disclose a heating element, when there were no amendments to the claims that would require an additional search of this element. Katou et al. was not cited anywhere in the previous Office Action. The only amendment made to the claims in the Applicant's response thereto dealt with the relative position of the shroud. Such an amendment to one element of the claim, therefore, cannot cause the Examiner to perform an additional search to an element wholly unrelated, that should have been adequately researched in the first Office Action. The MPEP explains that a final rejection is never

proper when the examiner introduces a new ground of rejection that is not necessitated by applicant's amendment of the claims. See MPEP §706.07(a).

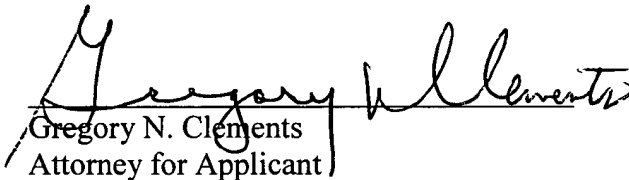
The Applicant, therefore, submits that the finality of the Office Action is improper. A final rejection is proper only when amendments raise new matter, or require an additional search by the Examiner. See MPEP §707.07 (a)-(b). If the Examiner had adequately researched the fully disclosed invention during the first Office Action, the newly cited art would not be necessary. Furthermore, a rejection based on a newly found reference that is not in response to the Applicant's amendments cannot be grounds for a final rejection. Applicant respectfully requests that the finality of the rejection be withdrawn, and that prosecution on the merits of the Application be reopened.

CONCLUSION

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in better form for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

In light of the remarks herein, Applicant requests that the Examiner reconsiders his rejections, and allows all of the currently pending claims, claims 1-11 and claims 18-23. Should the Examiner disagree, the Applicant kindly requests that the Examiner enter the Amendment for the purpose of presenting the claims in a better form, and to narrow the issues for appeal.

Respectfully submitted,



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